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LETTER TO THE EDITOR

An uncommon (hepatic) scintiscan during sentinel node biopsy – An optical illusion

Dear Sir,

A 65-year-old woman was scheduled for a re-excision of positive margins after an initial wide excision of a breast cancer. A preoperative scintiscan for a sentinel node biopsy was performed with a subdermal injection of ^{99}Tc radio-labelled colloid. When the scans were seen in the operation theatre, they looked odd (Fig. 1). The isotope appeared to be spread out over a large area that was too large to be the cavity of the prior excision – still, it was puzzling. A faint sentinel node was seen high up in the axilla.

At operation, it was difficult to localise the node as the probe kept giving a high count all along the chest wall. When the counts remained high even after the dissection reached the chest wall, in the absence of any detectable lymph nodes, we realised that the source was inside the chest – either pleura or the liver! Suddenly, we saw the obvious – the large area of uptake seen on the scintiscan was not the spill into the previous excision cavity – but the liver! How could we have missed the obvious shape of liver! It was just as in Dali's painting (Fig. 2) the bust of Voltaire

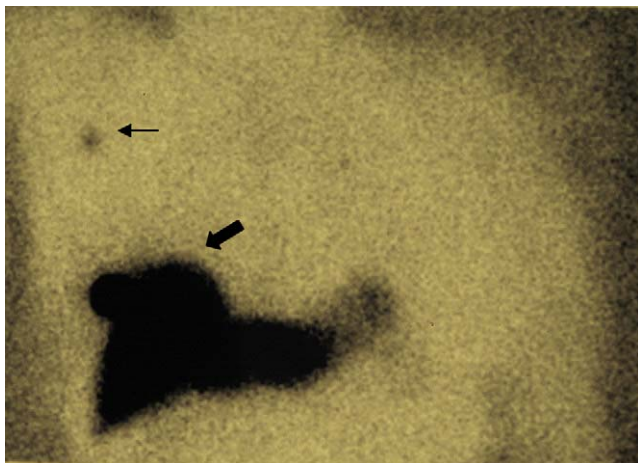


Figure 1 Scintiscan for a sentinel node biopsy. The thin arrow points to the faint axillary node and the thick arrow to the site of injection. The large black area in the hepatic region is (obviously) the liver.



Figure 2 Salvador Dalí, *The Slave Market with Disappearing Bust of Voltaire* (1940) – one moment we see the bust and the other we see two nuns walking through the doorway. Image courtesy of Mark Harden's *Artchive*.

springs up when you see it rather than the two nuns walking through the archway (or vice versa). With this realisation, it was easy to localise the sentinel lymph node higher up in the axilla by directing the probe away from the thorax.

Radio-labelled colloid tracer can reach the liver in high concentrations if injected directly into a vein. We normally inject the radio-labelled colloid intradermally and one would not expect encounter a large vein in that layer of skin. The vasodilatation after previous surgery may have been a contributing factor. In nearly 2000 sentinel node biopsies performed at our institute over five years, such a scintiscan has not been seen. We feel it is important to be aware of this phenomenon to allow its immediate recognition.

Yours sincerely,

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